Mr. Jeff Maghorn Hoover Precision Products, Inc. P.O. Box 737 Washington, Indiana 47501

Re: Exempt Operation Status,

027-12968-00025

Dear Mr. Maghorn:

The application from Hoover Precision Products, Inc., received on November 20, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following ball/roller bearing manufacturing facility, to be located at 110 S.E. 3rd Street, Washington, Indiana 47501 is classified as exempt from air pollution permit requirements:

(a) Twenty one (21) natural gas-fired space heaters (with a combined capacity of 1.71 MMBtu/hr emitting via stacks 1-21).

The following conditions shall be applicable:

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

#### ERG/RB

cc: File - Daviess County
Daviess Health Department
Air Compliance - Gene Kelso
South West Regional Office
Permit Tracking - Janet Mobley

Technical Support and Modeling - Michele Boner

Compliance Data Section - Karen Nowak

# Indiana Department of Environmental Management Office of Air Quality

# Technical Support Document (TSD) for a Exemption

# **Source Background and Description**

**Source Name:** Hoover Precision Products, Inc.

Source Location: 110 S. E. 3rd Street, Washington, Indiana 47501

County: Daviess

**Operation Permit No.:** 027-12968-00025

Permit Reviewer: ERG/RB

The Office of Air Quality (OAQ) has reviewed an application from Hoover Precision Products, Inc., relating to the operation of a ball/roller bearing manufacturing facility.

# **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

Twenty one (21) natural gas-fired space heaters with a combined capacity of 1.71 MMBtu/hr. emitting via stacks 1-21.

# **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

# **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

CP 027-3254-00025 issued November 3, 1993.

All conditions from previous approvals were incorporated into this permit except the following:

The rotary dryer included in Permit 027-3254-00025 has been removed.

## **Enforcement Issue**

There are no enforcement actions pending.

## Recommendation

The staff recommends to the Commissioner that the exemption be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 21, 2000, with additional information received on December 22, 2000.

## **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (Appendix A, 2 pages).

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)			
PM	0.0			
PM-10	0.1			
SO <sub>2</sub>	0.0			
VOC	0.0			
CO	0.6			
$NO_x$	0.7			

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is less than or equal to twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29) of any regulated pollutant is less than five (5) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.

#### **Actual Emissions**

No previous emission data has been received from the source.

#### **County Attainment Status**

The source is located in Daviess County.

Pollutant	Status		
PM-10	Attainment		
SO <sub>2</sub>	Attainment		
$NO_2$	Attainment		
Ozone	Attainment		
CO	Attainment		
Lead	Attainment		

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule

Hoover Precision Products, Washington, Indiana Permit Reviewer: ERG/RB

applicability relating to the ozone standards. Daviess County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Daviess County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### **Source Status**

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)		
PM	0.0		
PM10	0.1		
SO <sub>2</sub>	0.0		
VOC	0.0		
CO	0.6		
NO <sub>x</sub>	0.7		

- (a) This existing source is **not** a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on data provided by the source.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 027-12968-00025, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) Each criteria pollutant is less than 100 tons per year,
- (b) A single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) Any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

## **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14 and 40 CFR 63) applicable to this source.

# State Rule Applicability - Entire Source

Hoover Precision Products,

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#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

# Conclusion

The operation of this ball/roller bearing manufacturing facility shall be subject to the conditions of the attached proposed exemption 027-12968-00025.

# **Appendix A: Emissions Calculations Natural Gas Combustion Only** MM BTU/HR <100

**Small Industrial Boiler** 

Company Name: Hoover Precision Products, Inc.

Address City IN Zip: 110 South East 3rd Street, Washington Indiana 47501

CP: 027-12968

Plt ID: 027-00025 Reviewer: ERG/RB

Date: December 8, 2000

**Heat Input Capacity** Potential Throughput

MMBtu/hr MMCF/yr

1.7 15.0

#### Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO	
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0	
				**see below			
Potential Emission in tons/yr	0.0	0.1	0.0	0.7	0.0	0.6	

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

## Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

# Appendix A: Emissions Calculations Natural Gas Combustion Only

## MM BTU/HR <100

**Small Industrial Boiler** 

**HAPs Emissions** 

Company Name: Hoover Precision Products, Inc.

Address City IN Zip: 110 South East 3rd Street, Washington Indiana 47501

CP: 027-12968

Plt ID: 027-00025

Reviewer: ERG/RB

Date: December 8, 2000

## **HAPs - Organics**

Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.573E-05	8.988E-06	5.617E-04	1.348E-02	2.547E-05

#### HAPs - Metals

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.745E-06	8.239E-06	1.049E-05	2.846E-06	1.573E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.